

AMENDMENTS TO THE CLAIMS

Please **AMEND** claims 1, 7 and 13.

Please **CANCEL** claims 6, 15, 16, 19 and 20.

A copy of all pending claims and a status of the claims is provided below.

1. (Currently Amended) A method of accessing data in a non-relational database, the method comprising the steps of:

creating a master view having a master view index referencing the data;

creating a subordinate view of the master view having a subordinate view index referencing a subset of said master view index, where the subordinate view defines accessible portions of the data and the subordinate view index is linked to a subset of the master view index; ~~and~~

accessing the data via the subordinate view; and

caching at least one of the subordinate view and the temporary index map,

wherein the caching step includes:

checking whether a predetermined time period has elapsed by checking an elapsed time period counter;

if elapsed, checking whether access frequency exceeds a predetermined threshold by checking an access counter for the subordinate view;

if the predetermined threshold is exceeded, checking whether the at least one of the subordinate view and the index map can be cached; and

if so, then caching at least one of the subordinate view and the temporary index.

2. (Original) The method of claim 1, wherein the creating a master view includes defining at least one of sorted and categorized columns associated with the master view.

3. (Original) The method of claim 1, wherein the creating a subordinate view step includes defining at least one of a collapsed subordinate view and a non-collapsed subordinate view.

4. (Original) The method of claim 1, further comprising automatically managing the subordinate view.

5. (Original) The method of claim 1, wherein the accessing step includes creating an index map which links the accessible data associated with the subordinate view to the master index.

6. (Canceled)

7. (Currently Amended) The method of claim 1 6, further comprising resetting one of the elapsed time period counter to start a new elapsed time period for counting access frequencies and the access counter for counting access frequencies to the temporary index map during the new elapsed time period.

8. (Original) The method of claim 1, further comprising maintaining historical

information including access frequency to the subordinate view.

9. (Original) The method of claim 1, wherein the accessing step provides one of a reduction of data transferred to a client in a client-server architecture, a decrease in the amount of data manipulated during the accessing step, a decrease in response time to an access request, an increased performance, and a decrease in index size.

10. (Original) The method of claim 1, wherein the data includes at least one of categorized non-hierarchical data., hierarchical data, and categorized hierarchical data.

11. (Original) The method of claim 1, wherein the master view has a master index referencing at least a portion of the hierarchical data in the non-relational database.

12. (Original) The method of claim 1, wherein the creating a subordinate view step includes creating a plurality of subordinate views associated with one or more master views.

13. (Currently Amended) A method of enhancing performance when accessing hierarchical data in a non-relational database, the method comprising the steps of:

creating at least one subordinate view having a subordinate index referencing a subset of a master index of at least one master view;

creating a subordinate view index map associated with the at least one subordinate view when accessing the hierarchical data; and

accessing the at least a portion of hierarchical data by using the subordinate view
index map;

maintaining historical information including access frequency to the subordinate
view; and

caching at least one of the at least one subordinate view, the subordinate view
index map and temporary index, wherein the caching step includes:

checking whether a predetermined time period has elapsed by checking an
elapsed time period counter; and

if elapsed, checking whether the access frequency exceeds a
predetermined threshold by checking a access counter for the at least one subordinate
view;

if the predetermined threshold is exceeded, checking whether the at least
one subordinate view can be cached; and

if so, caching at least one of the at least one subordinate view, the
subordinate view index map, and the temporary index,

wherein an amount of data accessed using the at least one subordinate view is less
than the amount of data when accessing the at least one master view.

14. (Original) The method of claim 13, wherein the creating at least one subordinate view
includes defining at least one of sorted and categorized columns associated with the at
least one master view.

15. (Canceled)

16. (Canceled)

17. (Original) The method of claim 13, further including assigning priorities to one of the at least one master view and at least one subordinate view to grade performance.

18. (Original) The method of claim 13, wherein the subordinate view includes at least one of a collapsed view and a non-collapsed view and access via the collapsed view providing less data than access via a non-collapsed view.

19. (Canceled)

20. (Canceled)